

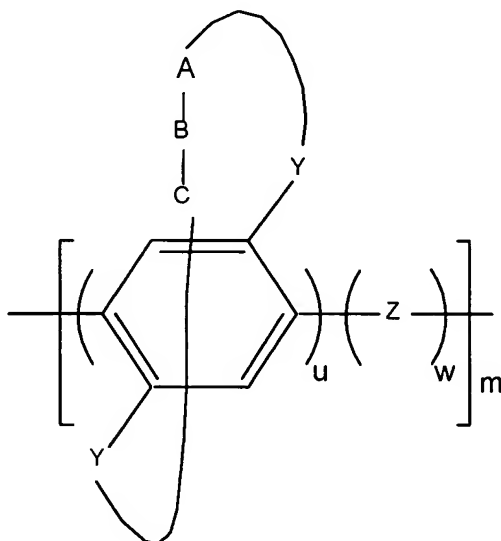
SPECIFICATION AMENDMENTS

Please replace pending paragraph **[0001]** with the following replacement:

[0001] The present application is a continuation-in-part ~~divisional~~ application of United States Patent Application No. 08/901,888, filed July 29, 1997, which claims priority to United States Provisional Application No. 60/023,071, filed August 2, 1996, both of which are hereby incorporated by reference in their entirety herein.

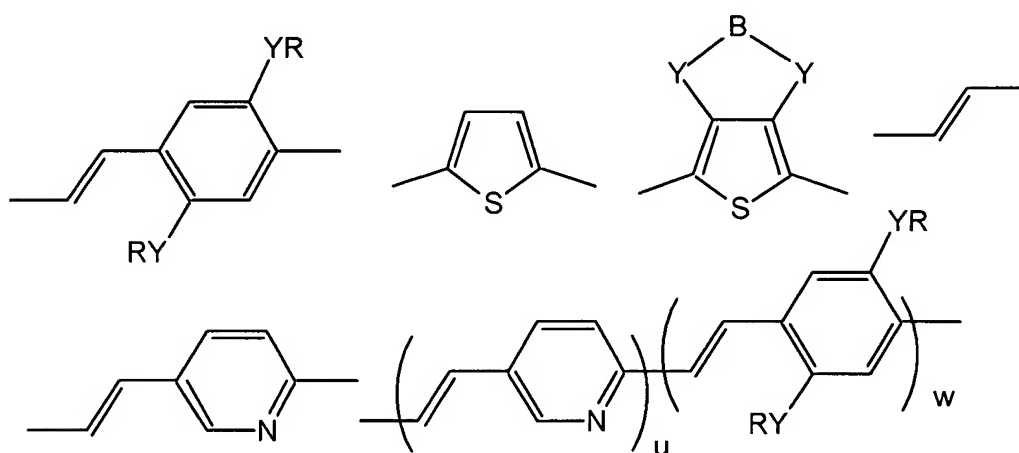
Please replace pending paragraph **[0010]** with the following replacement:

[0010] It is preferred that the polymer of the present invention comprises polymeric chains selected from the group consisting of alternating and random copolymers, having comprising the structure:



wherein m is the degree of polymerization; Y is selected from the group consisting of $-CH_2$, O , S , CO and NR_2 wherein R is an alkyl group containing 1 to 16 carbon atoms; A and C are independently selected from the group consisting of $(CH_2)_n$, $(CH_2CH_2O)_n$,

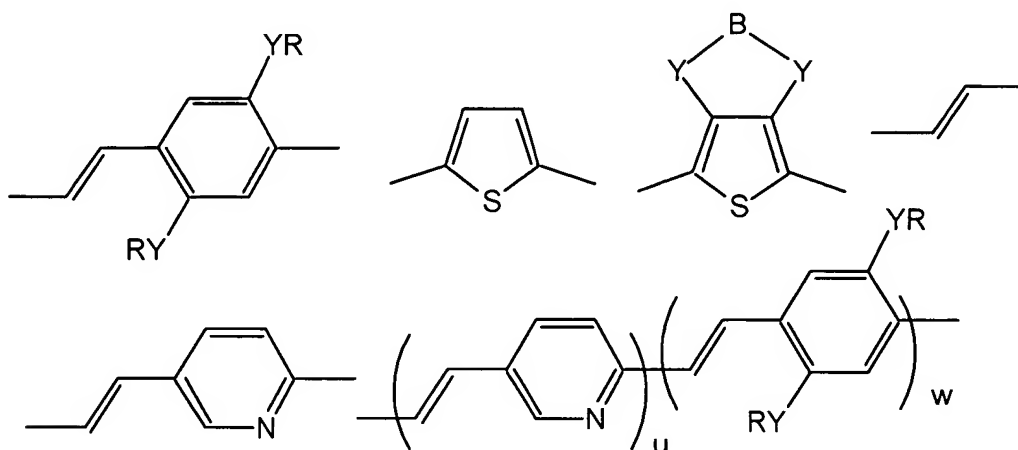
$(\text{CH}_2 \text{CH}_2\text{O})_n\text{NR}$ wherein R is an alkyl group containing 1 to 16 carbon atoms, and aryl groups having 6 to 14 carbon atoms; B is selected from the group consisting of $(\text{CH}_2)_n$, aryl groups having 6 to 14 carbon atoms, and calixarene having 18 to 200 carbon atoms; wherein u may be of a value independently selected from the group 1 to 6, inclusive; wherein w may be of a value independently selected from the group 1 to 6, inclusive; wherein n may be of a value independently selected from the group 0 to 6, inclusive; and wherein Z may be a structure selected from the group consisting of :



wherein R is an alkyl group containing 1 to 16 carbon atoms, wherein Y is selected from the group consisting of $-\text{CH}_2$, O, S, CO and NR_2 wherein R is an alkyl group containing 1 to 16 carbon atoms; B is selected from the group consisting of $(\text{CH}_2)_n$, aryl groups having 6 to 14 carbon atoms, and calixarene having 18 to 200 carbon atoms; wherein n may be of a value independently selected from the group 0 to 6, inclusive; wherein u may be of a value independently selected from the group 1 to 6, inclusive; and wherein w may be of a value independently selected from the group 1 to 6, inclusive.

Please replace pending paragraph **[0017]** with the following replacement:

[0017] It is preferred that at least one polymeric chain of the rotaxane is selected from the group of alternating and random copolymers having at least one structure selected from the group consisting of:



wherein R is an alkyl group containing 1 to 16 carbon atoms; wherein Y is selected from the group consisting of - CH₂, O, S, CO and NR₂ wherein R is an alkyl group containing 1 to 16 carbon atoms; B is selected from the group consisting of (CH₂)_n, aryl groups having 6 to 14 carbon atoms, and calixarene having 18 to 200 carbon atoms; wherein n may be of a value independently selected from the group 0 to 6, inclusive; wherein u may be of a value independently selected from the group 1 to 6, inclusive; and wherein w may be of a value independently selected from the group 1 to 6, inclusive.